

What is claimed is:

1. An apparatus for higher radix binary multiplication, said apparatus comprising:

means for multiplying the multiplicand by weight;

means for recoding the multiplier;

means for generating partial products of the low-order digits of the multiplier; and

means for combining said partial products of the low-order digits of the multiplier and partial products of the multiplicand.

2. The apparatus according to claim 1, wherein said multiplicand and multiplier are radix-32 and said multiplier is recoded to radix-7.

3. The apparatus according to claim 1, wherein said multiplicand and multiplier are radix-256 and said multiplier is recoded to radix-11.